



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/812,574	03/29/2004	Miyashita Kazuhiro	1981038	3662

7590 03/20/2007
PRO-TECHTOR INTERNATIONAL SERVICES
20775 Norada Court
Saratoga, CA 95070-3018

EXAMINER

TON, ANABEL

ART UNIT	PAPER NUMBER
----------	--------------

2875

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/20/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/812,574

Applicant(s)

KAZUHIRO ET AL.

Examiner

Anabel M. Ton

Art Unit

2875

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, - WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 December 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 45 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 45 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. Claim 45 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Applicant claims a plurality of lower prisms having an emitting face propagating light inside a light guiding plate, and then continues to claim a light guiding plate engaged with the plurality of lower prisms. It is unclear if applicant is referring to an additional light guiding plate related to the lower prisms or if this light guiding plate is one in the same. The same applies to the light guiding plate claimed with relation to the plurality of upper prisms. Applicant has not disclosed a clear structural relationship between the prisms and light guide plates in that it is unclear how they are structurally integrated with each other and on which side of the prisms the light guide(s) are disposed. Applicant recites "said totally reflected light beams transmitting through said upper prism plate can be looked as if those were emitted from nearby of border of corresponding lower prisms of LGP", it is not understood what applicant is intending to define by this recitation in particular the recitation that the light beams "can be looked as if those were emitted from nearby of border of corresponding lower prisms of LGP". The same applies for the earlier recitation of the light beams "being able to be looked at".

2. As best understood the following rejection applies.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 45 is rejected under 35 U.S.C. 103(a) as being unpatentable over Saito (5,890,791).

5. Saito discloses an LCD backlight module emitting light beams, to predetermined angle range, and pointing to a predetermined orientation, including: a plurality of lower prisms (12b); each comprising an emitting face, making light beams propagating in an angle range inside a light guiding plate transmitting through the emitting face of the lower prisms (inherent property of a light guide plate with prisms); a light guiding plate (13), engaged with the a plurality of lower prisms to be as, an integral unit; a plurality of upper prism(13a), each comprising an entering face (nearest to light source) and an total reflecting face (internal portion of 13), making light beams transmitting into the its entering face being be reflected totally from the total reflecting face and transmit through an upper prism plate in predetermined, orientations(figs 2,19,20); an upper prism plate, engaged with a plurality of upper prisms to be an integral unit (13); wherein light beam propagating in the predetermined angle range inside LGP is refracted by a corresponding one of said lower prism and transmits through said emitting face of the corresponding lower prism, and the passes through an

air gap; said light beam is incident on, refracted by and transmit into said entering face of a corresponding upper prism; said light beam propagates inside said upper prism and onto said total reflecting face, and then said light beam is totally reflected from said total reflecting face, and further said totally reflected light beams transmits through said upper prism plate, limited to said predetermined angle range, pointing to said predetermined orientations, being able to be looked as if that is emitted from corresponding specified positions of LGP (cols. 6-8); wherein a cross section of said lower prism is quasi-triangle(fig 2); wherein a cross section of said upper prism is quasi-triangle(fig 3); and said totally reflected light beams transmitting through said upper prism plate can be looked as if those were emitted from nearby of border of corresponding lower prisms of LGP.

- Sato does not disclose the equations represented in lines 34,38,41,46 and 48. It would have been obvious to one of ordinary skill in the art at the time the invention was made for the range of angles of the upper and lower prisms as represented in the aforementioned claim lines to be representative of the range of angles of the upper and lower prisms of Sato since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2nd 272, 205 USPQ 215 (CCPA 1980). Moreover, it appears that the values of the emission angles of the light guide plates and system of Sato work equally as well as applicants.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anabel M. Ton whose telephone number is (571) 272-2382. The examiner can normally be reached on 08:00-16:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on (571) 272-2378. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2875

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Anabel M Ton
Examiner
Art Unit 2875

AMT


Sandra O'Shea
Supervisory Patent Examiner
Technology Center 2800